

What is claimed is :

Sub 1 1. A gas opening/closing pin which opens and closes a gas inlet and outlet formed in a pipe holder which seals one end portion of a cylinder and moves the position of a piston in the cylinder, wherein at least one recess which opens the gas inlet and outlet is formed on the outer peripheral surface of the central portion of the gas opening/closing pin and one of a washer-shaped boss body and a diameter reducing portion in which the diameter is reduced is integrally formed.

Sub 2 2. A gas opening/closing pin according to claim 1, wherein the lower end portion of the diameter reducing portion of the gas opening/closing pin is caught by an annular jaw corresponding to the diameter reducing portion of the gas opening/closing pin and installed in the pipe holder.

Sub 3 3. A gas opening/closing pin according to claim 2, wherein the diameter reducing portion has at least one step.

Sub 4 4. A gas opening/closing pin according to claim 2, wherein the diameter reducing portion is tapered.

Sub 5 5. A gas opening/closing pin according to one of claims 1 to 4, wherein the gas opening/closing pin is made of a metal.

6. A gas opening/closing pin according to one of claims 1 to 4, wherein the outer

Q1
cut periphery of the upper end portion of the gas opening/closing pin is chamfered..

7. A gas opening/closing pin according to one of claims 1 to 4, wherein the gas

opening/closing pin is made of a nonmetal.

SW
D3
8. A gas opening/closing pin according to claim 1, wherein the recess formed on

the outer peripheral surface of the central portion of the gas opening/closing pin is
streamline-shaped.

9. A gas opening/closing pin according to claim 1, wherein the recess formed on

the outer peripheral surface of the central portion of the gas opening/closing pin has an annular
shape.

Add C3

Add DS